

CRY3204-S01

1/2" Pressure-field Prepolarized High- sensitivity Microphone Set

Features

- **Key Specifications**

Sensitivity	50 mV/Pa
Dynamic Range	16 dB to 138 dB
Frequency Range	3.15 Hz to 10 kHz \pm 2 dB

- **Applications**

Electroacoustic equipment test
 Coupler test

- **Standards**

IEC 61094 4:1995 Measurement microphones - Part 4

- **Components**

CRY3204 1/2" Pressure-field Prepolarized Microphone
 CRY3501 1/2" IEPE Preamplifier

Introduction

CRY3204-S01 is a pressure-field prepolarized microphone and preamplifier set with a wide range of applications. This type of microphone can be used to test various electroacoustic devices, such as speakers and headphones. It is also commonly used in conjunction with a coupler for related acoustic testing. Furthermore, it is well applied in the fields of acoustic design research and audio equipment calibration.

Highlights

- **Use of High-sensitivity Pressure-field Microphones**

High-sensitivity microphone sets have a broad measurement frequency range and are applicable to a variety of measurement scenarios.

Pressure-field microphone sets are specifically designed for measurements in small enclosed cavities or near the sound source ports, and are widely used in fields such as acoustic research and electroacoustic testing.

- **Compatibility**

The CRY SOUND prepolarized microphone kit requires a constant current source power module (IEPE power supply) that can provide a current of 2 mA to 20 mA and a no-load voltage of 24V.

IEPE is a universal constant current source power supply technology used on sensors. Each manufacturer has different names, such as ICP, CCP, etc.

- **TEDS Microphone Set**

Supports TEDS, and TEDS programmed to the IEEE 1451.4 standard for SMART transducers, V 1.0 format.

- **Calibration**

Each CRY SOUND microphone set is calibrated at the factory using traceable calibration equipment. Calibration certificates are provided with each unit. CRY SOUND recommends recalibration at least once a year.

- **Quality & Warranty**

All CRY SOUND microphone capsules use 3rd generation titanium diaphragms and protection grids and synthetic sapphire insulators - resulting in the most rugged and reliable measurement microphones on the market. Titanium provides superior corrosion resistance, high temperature stability, impact resistance and strength-to-mass than traditional nickel and stainless steel. All capsules are assembled in strict clean-room environments for maximum quality.

CRY SOUND microphones and preamplifiers are supported by a 10-year warranty—offering one of the best service guarantee in the world.

Technical Specifications

Specifications

Field Type	Pressure-field
Sensitivity(±1.5 dB)	50 mV/Pa, -26 dB re 1V/Pa
Frequency Response	3.15 Hz to 10 kHz ±2 dB
Polarization Voltage	0 V
Dynamic Range(re.20uPa)	16 dB to 138 dB
Inherent noise	16 dBA
Operating Temperature	-30°C to +70°C (-22°F to +158°F)
Temperature Stability	0.012 dB/°C (-10°C to +50°C) 0.007 dB/°F (+14°F to +122°F)
Static Pressure Stability	-0.01 dB/kPa
Operating Humidity Range	0 to 90%RH no condensation
Humidity Stability	< 0.1 dB (0 to 90%RH no condensation)
Pressure Equalization Vent	Rear vented
IEC 61094-4 Type	WS2P
Output Impedance	< 50 Ω
Maximum Output Voltage	> 10.0 Vp
DC Bias Voltage	12V ± 2 V
Current Source	IEPE (2 mA to 20 mA)
Typical Operating Current	4 mA
Interface Type	BNC

Ordering Information

Consisting of

Measurement Microphone	CRY3204 1/2" Pressure-field Prepolarized Microphone
Preamplifier	CRY3501 1/2" IEPE Preamplifier
Cable	BL5001 BNC to BNC Cable /1.6m

Optional Accessories

Microphone Holder	1/2" Microphone Holder
Power Supply	CRY575 Three-channel Microphone Power Supply

Frequency Response

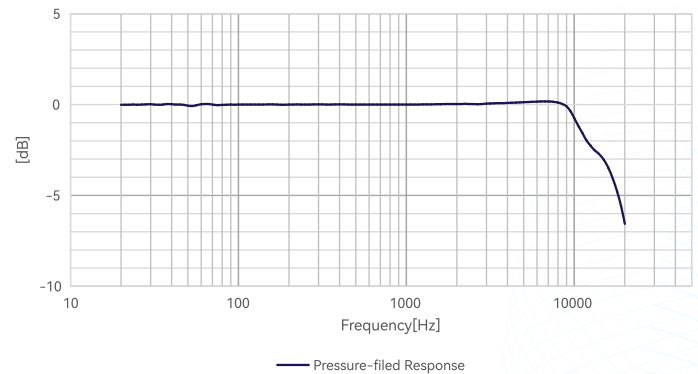


Fig.1 CRY3204-S01 Microphone Set Typical Frequency Response

Dimensions

Height with Grid	91.5 mm (3.6")
Diameter with Grid	13.2 mm (0.52")

Drawings(mm)[inch]

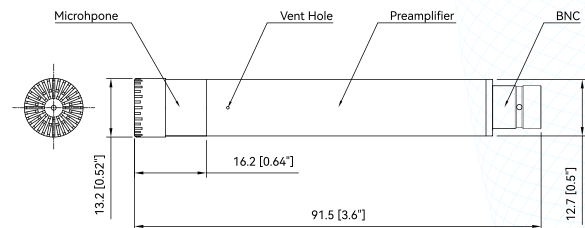


Fig.2 CRY3204-S01 Microphone Set Drawings

Related Products

CRY3102-S01	1" pressure-field prepolarized low-noise microphone set, 50 mV/Pa, 4 Hz-8 kHz, 12 dB-138dB
CRY3202-S02	1/2" pressure-field prepolarized wide-frequency microphone set, 12.5 mV/Pa, 3.15 Hz-20kHz, 23 dB-150 dB
CRY3402-S01	1/4" pressure-field prepolarized High frequency microphone set, 1.6 mV/Pa, 4 Hz-70kHz, 45dB-168 dB

